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Global E-Commerce: Issues and Challenges (AMCIS 1999)

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Abstract:

The phenomenal growth of the Internet has led to the emergence of the Net economy. This has fueled the process of globalization. Time and space restrictions are being eliminated and smaller companies from all over the world can now become participants in this economy. Underdeveloped and developing nations can also benefit significantly from the Net economy. This paper discusses the issues and challenges that potential participants like underdeveloped and developing nations need to address.

Introduction:

In recent years we have witnessed phenomenal growth in the globalization of businesses. Information technology has played a significant role in this growth. Using technology companies can conduct trade in different parts of the world without maintaining a physical presence. The Internet changes the way in which companies conduct business by compressing time and eliminating geographic restrictions. This has resulted in the growth of what is referred to as the net economy or Internet commerce. It allows a company like General Nutrients Cos., a Pittsburgh maker of nutrition supplements and health products, to efficiently and economically provide order and fulfillment process information to its 2500 worldwide subsidiaries (Adhikari, 1998). It allows a company like SpeedServe, a Tennessee-based retailer of books, videos, and video games to ship 1000 packages a week to 10,000 customers worldwide in 80 countries and to achieve that volume in only two years (Dickey, 1998).

This paper focuses on the use of the Internet to allow businesses in developing and under-developed nations to participate in the global economy. In the past these businesses have not had the resources or the market access necessary to compete globally. The potential to increase 'reach' using the Internet now provides them with the means to serve global markets.

The importance of the Internet to these global markets is growing. Forrester research estimates that Internet commerce could account for \$3.2 trillion in worldwide corporate revenue by 2003 and could represent 5% of

sales in the global economy (Information Week Daily, November 6, 1998). This growth is not restricted to developed countries. In a recent study conducted by KPMG India Pvt. Ltd. it was reported that the total volume of business transacted electronically in India for 1998 was Rs. 12.3 crores (US\$ 3,000,000 approx.) (<http://www.expressindia.com/news/07505899.htm>). Much of the current literature on electronic commerce focuses on the needs of businesses in advanced economies. In this paper we discuss the issues and challenges that businesses in developing and underdeveloped nations face to be a participant in the net economy.

Issues and Challenges:

To be successful in the global networked economy, certain conditions have to be met. In this section we explore the roles of leadership, the role of government, e-commerce infrastructure requirements, and products and services.

The Net economy visionary:

The e-commerce initiative in a nation or an organization should come from the top. As in any other systems development project, e-commerce needs a visionary or a champion who not only understands the concept but also is willing to commit national and/or organizational resources. This person should be willing to overcome political concerns to ensure that a country can be a participant in the net economy. George Colony, president of Forrester research says that "Knowledge of Internet commerce should be an IQ test for presidents and prime ministers, because the Internet economy is also an export economy" (Information Week Daily, November 6, 1998).

The Role of Government:

Individual governments will react to E-commerce, as they do to other forms of commerce, based on the perceived economic impact on their country along with other political concerns. Forrester research has warned that government interference (Information Week Daily, November 6, 1998) could dampen E-commerce growth.

Issues that need to be addressed in this area are as follows:

Restrictions on technology use: Governments at times attempt to restrict technology because of a perceived threat. For example the US will not allow software to be shipped out of their country that uses 128 bit encryption technology. National governments in the developing and under-developed countries should ensure that restrictions on technology use do not impede the growth of e-commerce.

Taxes: The issue of who taxes where has had some resolution on the international scale. Erickson (1999) points out that "The ministers of the Organization for Economic Cooperation and Development (OECD) endorsed proposals to guide member governments in implementing Internet taxes." They agreed that "the taxation principles [that] guide governments in relation to conventional commerce should also guide them in relation to electronic commerce." The OECD also recommended that "consumption taxes be levied in the country where consumption occurs."

The taxation issue however is far from resolved when one realizes that taxation (tariffs) often exists to protect a nation's own economy. This will dampen some firm's attempts to export to certain countries. The taxation issue will cause a heavy information burden on companies trying to do business over the web. The basic information that will be required will be knowing what is taxable and how it is taxed by country. Some firms could easily end up with some of their products being taxable and others not being taxable, and different products using different rates or formulas. For some firms the cost of finding the necessary information will discourage companies from selling to citizens of countries with small population.

Governments will face the challenge of developing new processes since most existing tariff structures and procedures are primarily geared at handling wholesale business, while much of the e-commerce is at a retail level. While the taxes are due to the consumption country, how and where they may be collected will truly be a taxing problem.

Legal issues over transborder data flows: Legal issues are a major potential stumbling block. For example the United States and the European Union are at odds over the European Data Protection Legislation (Rees 1999). As Celestino (1999) points out concerning global commerce "A legal framework that applies specifically to the Internet has not yet been developed."

Encouraging the development of e-commerce: Many governments are attempting to foster global e-commerce by firms located in their country. For example the UK's

Federation of Small Businesses' has expanded to provide new Internet Services to help small businesses explore the potential of the global electronic commerce (Smith 1999). The US supports a web site (www.ecommerce.gov) devoted to e-commerce. Governments in the developing and under-developed world should also encourage e-commerce and provide help to companies by creating awareness. Michael Putman, of Forrester research says "it's extremely important for government and business to cooperate on e-commerce" (Information Week Daily, November 6, 1998). He goes on to say that if these groups are inflexible, it will stifle progress. Businesses should be encouraged to become participants in the net economy. Informative seminars that provide information to businesses, especially the small entrepreneur, should be conducted to encourage e-commerce. Incentives, e.g., tax breaks, should be offered to companies that participate in the global economy.

E-Commerce infrastructure:

There are two components of the e-commerce infrastructure that determine the success of participants in the Net economy. The first part of the e-commerce phenomena is the telecommunications infrastructure that is required for conducting business over the Internet. Reliable, accessible and affordable telecommunications links are pertinent for the success of any e-commerce venture. Emphasis should be placed on developing these telecommunications links in developing and under-developed nations. Lack of such infrastructure would limit the potential of e-commerce in these parts of the world. International agencies like the United Nations, IMF, and the World Bank can play a significant role in this. For example, nations that are willing to create the necessary infrastructure can be provided loans with minimal interest rates.

The second prerequisite for the e-commerce infrastructure is the web site that is used for conducting business. The features of a good web site that is used for conducting business include a comprehensive yet easy to navigate site, providing live database access, customizing and presenting information in a familiar interface (esp. in the global environment with different languages, currencies, measurement units etc.) etc. The web site needs to be interactive (dynamic) and should present live and current data to worldwide customers. Care should be taken to ensure that the issue of scalability, in terms of users, data, networks, and servers etc. is taken into consideration and adapted to as an organization experiences growth.

Products and services:

E-commerce changes the way existing products and services are delivered to the consumer. Developing and

under-developed nations can focus on delivering their core competency based products and services to the consumer using the Internet. National policies can be drafted to encourage using the Internet for the trade of products and services that are the strength ("core competency") of a nation. This would lead to increased exports for these countries and enable them to be participants in the global economy. For example, a developing country like India can use the Internet to market products and services developed and created by their growing software industry.

E-commerce creates new products and services, e.g., software distributed over the Internet, and information-based services like daily news service are two examples. Smaller companies that did not have the resources to reach potential customers can now use the Internet to sell their products and services.

Conclusion:

In this paper we identified and discussed several issues and challenges that potential participants of the Net economy need to address. Visionary leadership of countries and companies is necessary to create change in developing economies. Friendly laws and regulations must be drafted and implemented to remove impediments and create incentives for moving to an Internet economy. A reliable and stable economic infrastructure must be established on which to build e-commerce. Products and services must be modified or created to meet the needs of global customers. Clearly, there is much work to be done by political and business leaders in developing and under-developed countries.

There is also an opportunity for researchers to explore and explain the relationships within and between these four essential conditions. For example, what are the attributes of successful global Internet visionaries in government and business? Do these attributes vary by country or is there some universal set that is driven by the nature of the Internet itself. What makes a product or service suitable to a global Internet market and how should countries identify and develop them given the special needs and characteristics of their local economies? What are the minimum essential elements of Internet infrastructure that resource constrained economies should focus on to support the growth of global e-commerce? The Internet has created new opportunities for developing nations and their businesses. A better understanding of the factors that lead to global e-commerce success will help all nations make better use of the technology to improve the lives of their citizens.

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